

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT PURSUANT
TO SECTION 13 OR 15(D) OF THE
SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): JANUARY 23, 2007

ENZO BIOCHEM, INC.

(Exact Name of Company as Specified in Its Charter)

NEW YORK

(State or Other Jurisdiction of Incorporation)

001-09974

13-2866202

(Commission File Number)

(IRS Employer Identification No.)

527 MADISON AVENUE
NEW YORK, NEW YORK

10022

(Address of Principal Executive Offices)

(Zip Code)

(212) 583-0100

(Company's Telephone Number, Including Area Code)

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (SEE General Instruction A.2. below):

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 5.02. DEPARTURE OF DIRECTORS OR CERTAIN OFFICERS; ELECTION OF DIRECTORS; APPOINTMENT OF CERTAIN OFFICERS; COMPENSATORY ARRANGEMENTS OF CERTAIN OFFICERS.

On January 23, 2007, Mr. Stephen B. H. Kent was elected to the Board of Directors of Enzo Biochem, Inc. (the "Company") as a Class II Director, effective immediately.

Also on January 23, 2007, shareholders at the Company's annual meeting elected Messrs. Shahram K. Rabbani and Irwin C. Gerson as Class I directors. Mr. Shahram K. Rabbani voluntarily stepped down on January 23, 2007 as Chief Operating Officer of the Company to devote more time to his activities as President of Enzo Clinical Labs. He will continue to serve as the Treasurer, the Secretary and a member of the Board of Directors of the Company.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ENZO BIOCHEM, INC.

Date: January 25, 2007

By: /s/ Elazar Rabbani

Name: Dr. Elazar Rabbani, Ph. D.

Title: Chairman of the Board and Chief Executive
Officer